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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of

Petition of Bell Atlantic Corporation for Relief from Barriers to Deployment of Advanced Telecommunications Services	))))	CC DOCKET No. 98-11

COMMENTS OF NEXT LEVEL COMMUNICATIONS

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I. Description of Next Level Communications

Next Level Communications ("NLC") was founded in July of 1994 to develop cost-effective solutions for providing local loop telecommunications services, including traditional telephony services and new switched digital video and high speed Internet access services. NLC is submitting comments in this proceeding because it shares Bell Atlantic's concern that current regulation creates unnecessary and artificial barriers to the deployment of advanced technologies, including local loop systems developed and manufactured by NLC.

NLC has developed the "NLevel^3" product, which can be configured for Fiber-to-the-Curb ("FTTC") deployments as well as for Digital Loop Carrier ("DLC") applications. When deployed in either a FTTC or DLC configuration, the NLevel^3 equipment can support advanced broadband services by the integration of coaxial cable or twisted wire pair modems. The twisted wire pair modems utilize one of the Digital Subscriber Loop ("DSL") transmission techniques for copper pairs, which are generically termed "xDSL," and include Very High Speed Digital Subscriber Loop ("VDSL"), Rate Adaptive Digital Subscriber Loop ("RADSL") and Asymmetric Digital Subscriber Loop ("ADSL"). Absent regulatory reform, however, these capabilities may not be widely deployed to the American people.

II. Introduction and Summary

Section 706 of the Communications Act was enacted as part of the Telecommunications Act of 1996[1/] ("1996 Act"). Section 706 instructs the Federal Communications Commission ("Commission") and state commissions to adopt "regulating

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1/ Pub. L. No. 104-104, 110 Stat. 56 (1996), § 706.

methods" to encourage the timely deployment of advanced telecommunications capabilities. The deployment of advanced capabilities today is frustrated by regulatory impediments, including disincentives and uncertainty with respect to the recovery of investment in broadband infrastructures. NLC, based on its experience in the marketplace, observes that these regulatory constraints are operating presently to curtail investment in advanced local loop facilities.

Without the proper regulatory environment, the promise of advanced telecommunications networks as envisioned by Section 706, and as otherwise available from manufacturers such as NLC, will be illusory. The Commission should embrace public policies which encourage long-term broadband infrastructure investment. Without delay, the Commission should: 1) eliminate cost allocation impediments to efficient pricing of advanced broadband services; 2) not apply existing unbundling and resale requirements to equipment used to provide broadband services; 3) grant Bell Atlantic's request for interLATA relief; and 4) revise existing customer premises equipment ("CPE") rules to give network operators and consumers greater flexibility with regard to the deployment of broadband equipment in the home.

The NLevel^3 equipment is a product which can help deliver advanced telecommunications network services, thus fulfilling the Congressional intent of Section 706. NLevel^3 can be deployed in broadband-first or in telephony-first applications, and is actively being deployed by two Regional Bell Operating Companies ("RBOCs").[2/] Because the

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[2/] Bell Atlantic and US WEST have begun to deploy the NLevel^3 local loop network technology.

product is cost competitive with non-upgradeable Digital Loop Carrier systems, it has clear deployment advantages in many situations. Despite the passage of the 1996 Act, uncertainty with respect to cost recovery mechanisms for advanced local loop infrastructures and other regulatory constraints continue to have a negative impact on the deployment of NLevel[3] and other advanced network technologies. As a result, the public is being denied access to efficient and advanced telecommunications services. NLC is thus filing these comments to support the removal of regulatory roadblocks to infrastructure deployment and to insure that a competitive market will exist for broadband equipment and services in a timely manner.

NLC concurs with Bell Atlantic that xDSL services should be free from pricing, unbundling, and separations restrictions designed for voice calls. The Commission is permitted under Section 706 to take additional action to ensure that there are adequate regulatory incentives to support the high data rates and high penetration rates envisioned by Section 706 of the 1996 Act.

Bell Atlantic in its petition identifies other regulatory impediments to the rapid and widescale deployment of advanced communications technologies. The Commission should eliminate as quickly as possible any unnecessary regulations identified in this proceeding. This includes the removal of interLATA restrictions on high-speed broadband services as explained by Bell Atlantic in its petition.[3/]

[3/] InterLATA restrictions are particularly incompatible with advanced telecommunications, given the interLATA and international nature of the Internet and other high-speed data applications.

In addition to the transmission equipment developed by NLC, the NLevel[3] system includes a Residential Gateway, which is a set-top device that serves as a termination unit in the home for high-speed signals received over a twisted wire pair xDSL transmission system. The Residential Gateway can provide television services to multiple television sets in the home without the need for additional set-top equipment, and serves as the network termination for data signals, which can be routed to computers in the home via a traditional Ethernet interface. Because of the wide discrepancy in CPE rules between Title II carriers and Title VI cable operators, NLC notes that its customers may be forced to make purchasing decisions regarding advanced residential equipment that are regulatory-driven, rather than market or economic-driven. The existing CPE rules do not provide the appropriate framework for xDSL deployment and substantial reform is needed to support the rapid, timely deployment of broadband services and equipment.

NLC believes that regulatory relief as described herein will well serve the public interest by eliminating disincentives to invest in these new technologies, thereby allowing the American people improved access to advanced communications capabilities. In this increasingly competitive global marketplace, the United States cannot afford a second-tier telecommunications infrastructure. If investment in advanced network infrastructures is to expand, the Commission must also recognize that granting petitions such as Bell Atlantic's should be only the beginning of more comprehensive regulatory relief.

III. Section 706 of the 1996 Telecommunications Act Provides the Basis for Regulatory Relief

Section 706 of the 1996 Act requires that the Commission and each State commission with regulatory jurisdiction over telecommunications services encourage the deployment of advanced telecommunications services. Furthermore, such deployment should be on a reasonable and timely basis -- suggesting that removal of barriers to the deployment of all xDSL and FTTC technologies (and not merely the ADSL technologies prevalent to date) is well within the regulatory relief contemplated by Congress in enacting Section 706. Moreover, the regulatory relief granted by the Commission should be such that barriers to infrastructure investment are truly removed, and that the infrastructure put in place will promote the Congressional intent of advanced services to all Americans.

A. Historic Pricing Rules Discourage Broadband Investment

In addition to avoiding the unnecessary and counterproductive regulatory impediments identified below and in the Petition of Bell Atlantic, the Commission should ensure that it does not create economic disincentives to investment in broadband technologies resulting from pricing rules. Historically, regulators imposed policy determinations in the form of arbitrary depreciation rates and cost allocation rules under a rate-of-return regulatory structure. The Commission moved away from that paradigm when it adopted a price cap form of regulation, which has been followed, in part, by the States. In adopting price cap regulation, the Commission acknowledged that the rate-of-return/detailed cost allocation model created uneconomic investment incentives for the carriers, engendered a great deal of

uncertainty and spawned a virtual morass of difficult (if not impossible) decisions for the regulators.

Particularly when shorn of the vestiges of rate-of-return regulation (such as "sharing" and arbitrary meddling in the guise of "exogenous changes"), price cap regulation avoids these regulatory pitfalls. Under a "pure" price cap model, carriers will make decisions as to how quickly to deploy broadband data services based on the actual economics of the technologies and their predictions of the demand for the new services. The carriers' investment decisions will not be driven by whether the regulator has correctly navigated the incredibly difficult task of determining how to properly allocate shared costs among a myriad of current and potential offerings. Likewise, the carriers' investment decisions will not be delayed by their need to avoid uncertainty as to what cost allocation rules are eventually adopted by the Commission.[4/]

At the same time, under price caps the customers of Plain Old Telephony Services ("POTS") are certainly no worse off regardless of what investment decisions the company makes, because the prices for his or her still-regulated POTS are constrained by the price cap ceilings. On the other hand, those POTS customers are better off insofar as they will have access to advanced broadband services at market-driven prices. Thus, NLC urges the Commission and the States to use regulatory models for those services where regulation is

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[4/] By way of example, the Commission has not yet acted on its notice of proposed rulemaking to address cost allocation rules for local exchange carrier provision of video services that was issued nearly two years ago. *Allocation of Costs Associated with Local Exchange Carrier Provision of Video Programming Services*, CC Docket No. 96-112, FCC No. 96-214, released May 10, 1996.

still necessary that let the marketplace, and not arbitrary cost allocation rules, drive the deployment of broadband services.

B. Unbundling and Resale Requirements Under Section 251 Create Disincentives for Incumbent Local Exchange Carriers to Deploy Advanced Infrastructure

NLC does not propose that the Commission provide incentives for deployment of any particular technology -- fiber based or otherwise -- but rather that the Commission clarify that advanced infrastructures, in whatever form, be free from Section 251 unbundling requirements as requested by Bell Atlantic.[5/] As explained by Bell Atlantic, the costs of deploying such advanced infrastructures are large, and there are significant risks involved.[6/] Reasonable and fair compensation for undertaking these risks can only be realized when the services are deregulated.

In fact, the current unbundling requirements actually provide a disincentive for an incumbent to invest in advanced infrastructure. For example, when a local exchange carrier ("LEC") uses NLC's equipment to provide xDSL services, the LEC will purchase modems to place on either end of the subscriber loop. These modems allow the subscriber to obtain xDSL services using much of the current embedded network. The Commission should not require that a LEC unbundle such equipment under section 251. Any company serving that subscriber can place the same or similar electronics at the end of the loop. If the

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[5/] Bell Atlantic Petition, p. 11.

[6/] Bell Atlantic Petition, p. 15.

Commission requires that equipment such as the NLC modems be unbundled, no incumbent LEC will invest in the equipment, as competitors, with no investment risk at all, will be allowed to avail themselves of the technology. The result will be that consumers will be denied advanced services unless and until a competing LEC provides those services, because the regulatory regime under section 251 acts as a disincentive for the incumbent LEC to make substantial investments in its broadband infrastructure.

Additionally, the current regulatory framework, where the prices a carrier charges to its customers and its competitors (for resale or unbundling) are strictly limited, allows competitors to take advantage of an incumbent's investment with no risk of its own, and provides little incentive for companies ubiquitously to deploy advanced infrastructures. The Commission should use a paradigm, outside of the current regulatory framework, that will encourage the deployment of advanced infrastructures, so that eventually all Americans will be able to enjoy the benefits of advanced telecommunications services. In this manner, the Congressional intent of Section 706 will be fulfilled.

C. The Existing InterLATA Backbone for the Internet Cannot Meet Existing or Future Bandwidth Demands

As discussed in the Bell Atlantic Petition,[7] the Internet's backbone cannot support the present demand for bandwidth, much less the future demands of an economy which may very well be based substantially on electronic commerce. Bell Atlantic, however, is foreclosed from meeting this important need because of present limits on its allowable

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[7] Bell Atlantic Petition, Attachment 2, pp. 22-23.

services and facilities. NLC believes that the Commission should quickly permit Bell Atlantic to provide high-speed broadband services without regard to present LATA boundaries in order to fill this critical void.

D. Other Regulatory Barriers

It is likely that it will be years before a full featured ADSL standard can be developed.[8/] An ADSL standard is in the interest of manufacturers, network operators, and consumers, and there is little doubt that in the long term standards for both ADSL and other higher data rate DSL transmission systems will be adopted. In the interim, however, it will be necessary for network operators to roll out technologies from vendors which may be based on an emerging standard, but which contain substantial amounts of proprietary technology. Thus, in addition to the regulatory relief requested by Bell Atlantic under Section 706 of the 1996 Act, the Commission should grant regulatory relief that will allow xDSL deployment to occur prior to the development of full-featured, non-proprietary standards. Such interim relief will allow the rapid deployment of xDSL deployment that can support high penetration rates.

In addition, the present rules for CPE were developed in the context of and revolve around the definition of the analog POTS interface as reflected in Part 68 of the

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[8/] Efforts by the newly-formed Universal ADSL Working Group (UAWG) may eventually, in conjunction with other standardization efforts, result in a widely-deployed ADSL standard. Such a standard, however, will take a number of years to develop. By way of comparison, NLC notes that it took over four years for the MPEG-2 standard, a great success from a technical and business perspective, to evolve from a "frozen technical standard" to a licensing package.

Commission's Rules as well as the "unbundling requirement" of Section 64.702(e) of the Commission's Rules. These rules have worked well for consumers with respect to analog telephone services and low-speed modem services over analog lines, but are problematic when applied to the DSL technologies.

The *Computer II* and *Computer III* proceedings attempted neatly to divide the network and terminal interface from the customer's premises wiring and equipment, and also developed the concept of Network Channel Terminating Equipment ("NCTE"). Although the Commission has declared NCTE to be CPE and has narrowed the "multiplexer exception"[9/] and the availability of waivers from the unbundling requirement, the Commission also recognized that this approach might not be suitable as the migration to more digital platforms took place.[10/] NLC believes that this latter prediction of the Commission has proven to be quite accurate.

NLC believes that regulatory relief to encourage the deployment of xDSL technologies will involve a modification of the CPE rules, which will result in the removal of the artificial distinction between CPE and network equipment based solely on location of the piece of equipment. NLC notes that the deployment of cable modems is not inhibited by distinctions based on location,[11/] and believes that a similar approach should be applied for

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[9/] See *Computer III, Phase II Reconsideration*, 3 FCC Rcd 1150, (1988) at ¶ 138; *Computer III Supplemental Notice*, 104 FCC 2d 958 (1986) at ¶¶ 322-325 (1986); and *Computer III Remand Hearings*, 5 FCC Rcd 7719 (1990) at ¶ 21.

[10/] See *Computer III, Notice of Proposed Rulemaking*, 1985 FCC LEXIS 2770, at paras. 149-152 (1985).

[11/] Cable modems have been deployed under Title VI with no CPE unbundling or network disclosure requirements.

xDSL equipment. Consumers should have the option of leasing xDSL modems unbundled from service offerings as part of the service, as well as the ability to purchase such equipment, particularly during the initial years of deployment when the network interfaces are evolving. Thus, waivers from Section 64.702(e)'s unbundling requirement should freely be made available for xDSL deployments, and regulatory forbearance from the unbundling rule for broadband network equipment in the customer premises should be implemented, when such equipment presents one or more standard interfaces and is commercially available. Retention of the current requirements would otherwise frustrate the deployment of these advanced communications technologies.

Finally, NLC believes that the Commission should clarify that the voluntary participation of manufacturers in standards bodies meets network disclosure requirements. When manufacturers participate in standards bodies they agree to licensing on a fair and non-discriminatory basis, and ultimately to transfer technology to licensees to enable incorporation of the network interface technology in a variety of new broadband CPE. Thus, the purposes of network disclosure obligations are met in this manner, without compromising proprietary technology as would occur under the present network disclosure requirements.

IV. Granting the Relief Requested in the Petition Should be Considered a Beginning, Not an End

For all the reasons stated above, the Commission should grant the relief requested. The Commission should not stop there, however. Granting Bell Atlantic's petition will allow near-term deployment of broadband services. The goals of Section 706 will not be truly

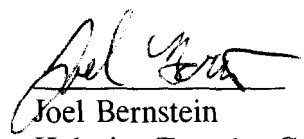
fulfilled until the Commission creates long-term incentives for advanced infrastructure deployment. As mentioned above, pricing, unbundling, resale, and network disclosure are among the issues which must be resolved on a going-forward basis to encourage long-term technology-neutral broadband deployment. Without a comprehensive solution, advanced services will be deployed piecemeal. While that situation may be preferable to the current situation (where advanced deployment is stifled by the regulatory regime), the Commission needs to consider moving toward a considerably less-regulated environment which will allow broadband deployment to all Americans, as contemplated by Section 706.

V. Conclusion

Bell Atlantic's petition raises legitimate concerns that the Commission should address in order to begin fulfilling the Congressional mandate of Section 706. Under the current regulatory regime, there has been very little investment in advanced broadband infrastructures. By eliminating unnecessary regulatory impediments, the Commission will further the public interest by supporting ubiquitous availability of advanced communications services. NLC strongly encourages the Commission to: 1) eliminate cost allocation impediments to efficient pricing of advanced broadband services; 2) not apply existing unbundling and resale requirements to the equipment used to provide broadband services; 3) grant Bell Atlantic's request for interLATA relief; and 4) revise existing CPE rules to give network operators and consumers greater flexibility with regard to the deployment of broadband equipment in the home. For the foregoing reasons, NLC supports Bell Atlantic's

petition and urges the Commission to grant the relief requested in Bell Atlantic's petition and herein.

Sincerely,



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